IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applic	cant	CALLEN	et al.	Group Art Unit:	N/A		
Applic	catio	n No.: 10/517,5	46	Examiner:	N/A		
Filed:		Decembe	er 10, 2004)	Atty. Docket No.	23003-0001		
For:	For: A CONTROL CIRCUIT AND A METHOD FOR ELECTRICALLY CONNECTING A LOAD TO A POWER SOURCE						
P.O. I	Зох '	oner for Patents 1450 1, VA 22313-1450					
		INFORM	ATION DISCLO	SURE STATEME	NT		
SIR:							
	The	following are inclu	ded with this Info	ormation Disclosur	e Statement:		
\boxtimes	A.	PTO/SB/08					
	B.	CERTIFICATION (37 C.F.R. 1.97)	c)-before final C	Office Action or allo	wance)		
	C.	\$180.00 FEE PAY (37 C.F.R. 1.97(Office Action or allo	wance)		
	D.	\$180.00 PETITION PAYMENT (37 C.F.R.1.97(EE		
comp		following are subme with 37 CFR 1.98	itted in the abov	,	ation in		
	I.	A copy of each listed U.S. Patent and U.S. Patent application publication [1.98(a)(2)(i)].					
	II. ⊠	A copy of each listed foreign patent and/or published foreign patent application. For each listed foreign patent and/or published foreign patent application [1.98(a)(2)]: a) the English language version or an English translation if not published in English, if available (see PTO-1449)[1.98(a)(3)] and/or					

Attorney Docket No. 23003-0001

Application No.: 10/517,

,

3. This information disclosure is submitted before the mailing date of a notice of allowance under 1.311 [1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below). 4. This information disclosure is submitted after the mailing date of a final action under 1.113 [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below). 5. This information disclosure is submitted after the mailing date of a notice of allowance under 1.311, but before the payment of the issue fee [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below). 6. This information disclosure statement is submitted with the statement required for items 2, 3, 4 or 5 above [1.97(c), (d), (e)]: I, Shawn K. Leppo, hereby state the following: Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this information disclosure was known to any individual designated in 1.56(c) more than three months prior to the filing of this information disclosure statement. 7. This information disclosure statement is submitted with the fee of \$180 set forth in 1.17(p) [see items 2 and 3 above]. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059. (Please note, no fee is required for items 2 and 3 above if the Item

Attorney Docket No. 23003-0001

Application No.: 10/517,

6 statement is provided).

Attorney Docket No. 23003-0001 Application No.: 10/517,

8. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059.

Dated: March 10, 2005

Respectfully submitted, McNees Wallace & Nurick LLC

Shawn K. Leppo Reg. No. 50,311 100 Pine Street P.O. Box 1166

Harrisburg, PA 17108-1166

Fax: (717) 237-5300

Phone: (717) 237-5218

PTO/SB/08A (08-03) Approved-for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to res

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Substitute for form 1449/PTO

Sheet 1

(Use as many sheets as necessary)

Complete if Known						
Application Number	10/517,546					
Filing Date	December 10, 2004					
First Named Inventor	CALLEN et al.					
Art Unit	N/A					
Examiner Name	N/A					
Attorney Docket Number	23003-0001					

			U. S. PATEN	T DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	^{US-} 6023400	02-08-2000	Nevo	
	2	^{US-} 4791517	12-12-1988	Park	
	3	^{US-} 2004183828	09-23-2004	Nichogi et al.	
		US-			
•		US-			
• .		US-			
		US-		<u> </u>	

			IGN PATENT DOCU	JMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
	1.	Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
	4	FR 2640441 A	06-15-1990	Soulie		
	5	CN 1 384 578	12-11-2002	Zhong Ruxiang		
	6	CN 1 384 577	12-11-2002	Zhong Ruxiang		
	7	CN 1 384 576		Zhong Ruxiang		
	8	CN 1 384 575		Zhong Ruxiang		
	9	SG 0086358 A1	02-19-2002	Hi Power System		

Examiner	 Date	
Signature	Considered	
-		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (08-03) Approved-tor use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 2

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known					
Application Number	10/517,546				
Filing Date	December 10, 2004				
First Named Inventor	CALLEN et al.				
Art Unit	N/A				
Examiner Name	N/A				
Attorney Docket Number	23003-0001				

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	 	Number-Kind Code ^{2 (# known)} US-			1 iguico Appeai
		05-			
		US-			·
		US-			
	1	US-			
		US-			-
		US-		•	
******		US-			
		US-			
_		US-			
		US-			
-		US-	 	•	

		FORE	IGN PATENT DOCU	IMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ^{3 "} Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
	10	KR 2041973 A	06-05-2002	LG Electronics		
	11	WO 96/27138	09-06-1996	Haefly Trench		
	12	EP 1 420 431 A1	05-19-2004	Mitsubishi		
	13	WO 02/052598	07-04-2002	ABB Schweiz		
	14	DE 101 20 189 A1	11-14-2002	Prodex Tech		
	15	CN 1350352 A	05-22-2002	Liu		

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (08-03) Approved not use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

23003-0001

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO **Application Number** 10/517,546 Filing Date December 10, 2004 INFORMATION DISCLOSURE First Named Inventor CALLEN et al. STATEMENT BY APPLICANT Art Unit N/A (Use as many sheets as necessary) **Examiner Name** N/A

Sheet 3

of 4

Attorney Docket Number

	U. S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear			
		Number-Kind Code ^{2 (# known)}			Figures Appear			
		US-						
		US-						
		US-						
,		US-						
		US-						
		US-		, . <u>, ,</u>				
		US-						
		US-						
		US-						
		US-						
		US-						
-		US-						
		US-						
		US-						
		US-						
		US-						
		US-						
		US-						
		US-						

			IGN PATENT DOCU	JMENTS		
Examiner Initials*	Cite No.1		Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Π
			MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
	16	WO 01/50566 A1	07-12-2001	ABB Ricera		Г
	17	EP 0 952 653 A2	10-27-1999	Siemens AG		Г
	18	EP 1 241 698 A2	09-18-2002	Kopp Heinrich		Г
	19	EP 0 890 846 A2	01-13-1999	Circuit Breaker		
	20	EP 0 851 450 A2	07-01-1998	Maier & Cie		Г

Examiner Signature		-	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Nind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE	
INFORMATION DISCLOSURE	
STATEMENT BY APPLICANT	

of 4

(Use as many sheets as necessary)

Substitute for form 1449/PTO

Sheet 4

Complete if Known				
Application Number	10/517,546			
Filing Date	December 10, 2004			
First Named Inventor	CALLEN et al.			
Art Unit	N/A			
Examiner Name	N/A			
Attorney Docket Number	23003 0001			

Examiner	Cite	Document Number	U. S. PATENT D	Name of Patentee or	Pages Columns Lines 14/2
Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	-	US-			- iga-ou-rippou
		03-			
		US-			
		U\$-			
		US-			
		US-	 		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Traine .	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	T
			Or Relevant Figures Appear			
	21	EP 0 651 488 A1	05-03-1995	Circuit Breaker		
	22	JP 2002-133996	05-10-2002	Kawamura Elec.		
	23	JP 8163704	06-21-1996	Fujikura Ltd.		
	ļ					
						L
						1

Examiner	 Date	
		1
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.